

USSN 09/758 514

IN THE CLAIMS

1. (Currently Amended) A monitoring device for checking for a predefined position ~~of~~ of a body or for checking for the presence of a body, comprising:

a pivotal checking element ~~(52)~~_i;

a motor ~~(20)~~ for driving the checking element ~~(52)~~_i and

A2
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a control device ~~(50)~~ for controlling the pivotal movement of the checking element ~~(52)~~_i;

wherein characterised in that the control device ~~(50)~~ specifies the pivotal position of the checking element ~~(52)~~ in dependence on the time and

wherein the pivotal position of the checking element relative to a starting position is known at every time in the pivotal movement of said checking element.

2. (Currently Amended) A monitoring device in accordance with Claim 1, wherein characterised in that the pivotal movement of the checking element ~~(52)~~ is controlled in accordance with a predefined position-time course ~~(226, 236)~~.

USSN 09/758 514

3. (Currently Amended) A monitoring device in accordance with Claim 2, wherein ~~characterised in that the~~ a controlled value of the control of the pivotal movement of the checking element ~~(52)~~ is the pivotal position of the checking element ~~(52)~~ at a predefined time.

4. (Cancelled)

5. (Currently Amended) A monitoring device in accordance with Claim 1, wherein ~~characterised in that~~ the time needed by the checking element ~~(52)~~ for its pivotal movement from a first pivotal position into a second pivotal position is predefined.

6. (Currently Amended) A monitoring device in accordance with Claim 5, wherein ~~characterised in that~~ the time, which the checking element ~~(52)~~ needs for its pivotal movement commencing from a starting position ~~(150)~~ until arriving at a checking position ~~(228)~~, is fixed.

7. (Currently Amended) A monitoring device in accordance with Claim 5, wherein ~~characterised in that~~ the time, which the checking element ~~(52)~~ needs for its pivotal movement commencing from a starting position ~~(150)~~ until arriving at a reversal position ~~(228; 240)~~, is fixed.

8. (Currently Amended) A monitoring device in accordance with Claim 1, wherein ~~characterised in that~~ the time, which the checking element ~~(52)~~ needs for its pivotal movement commencing from a reversal position ~~(228; 240)~~ until arriving at the starting position ~~(150)~~, is fixed.

9. (Currently Amended) A monitoring device in accordance with Claim 1, wherein ~~characterised in that the~~ a predefined position-time course ~~(226; 236)~~ is stored in the control device.

10. (Currently Amended) A monitoring device in accordance with Claim 1, wherein ~~characterised in that~~ a control value for the control device ~~(50)~~ is a time increment.

USSN 09/758 514

11. (Currently Amended) A monitoring device in accordance with Claim 1, wherein ~~characterised in that~~ a control value is a pivotal position increment or a pivotal position decrement.

12. (Currently Amended) A monitoring device in accordance with Claim 1, wherein ~~characterised in that~~ a control value is formed in dependence on a predefined maximum torque of the checking element ~~(52)~~.

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13. (Currently Amended) A monitoring device in accordance with Claim 1, wherein ~~characterised in that~~ the magnitudes of path intervals and/or time increments for the control of the pivotal position of the checking element ~~(52)~~ are matched to ~~the~~ a predefined position-time course ~~(226; 236)~~.

14. (Currently Amended) A monitoring device in accordance with Claim 1, wherein ~~characterised in that~~ the control device ~~(50)~~ comprises a position control device ~~(202)~~ which compares an actual pivotal position at a certain time with a reference pivotal position and generates a control value signal in dependence on the result of the comparison.

15. (Currently Amended) A monitoring device in accordance with Claim 14, wherein ~~characterised in that~~ the position control device ~~(202)~~ comprises a PD controller ~~(210)~~.

16. (Currently Amended) A monitoring device in accordance with Claim 1, wherein ~~characterised in that~~ the control device ~~(50)~~ comprises a torque control device ~~(214)~~ which compares an actual motor current with a reference motor current and generates a control value signal in dependence on the result of the comparison.

17. (Currently Amended) A monitoring device in accordance with Claim 16, wherein ~~characterised in that~~ the torque control device ~~(214)~~ comprises a P controller ~~(222)~~.

USSN 09/758 514

18. (Currently Amended) A monitoring device in accordance with Claim 1, wherein ~~characterised in that~~ a motor driver (102) is provided for controlling the motor (20) in dependence on one or more control values.

19. (Currently Amended) A monitoring device in accordance with Claim 18, wherein ~~characterised in that~~ the motor driver (102) provides a pulse width modulated signal for controlling the motor (20).

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20. (Currently Amended) A monitoring device in accordance with Claim 14, wherein ~~characterised in that~~ there is provided a control value limiter (212) to which control value signals delivered by the position control device (202) and ~~the~~ a torque control device (214) are supplied for producing a torque limiting control value signal.

21. (Currently Amended) A monitoring device in accordance with Claim 1, wherein ~~characterised in that~~ the checking element is pivotable commencing from a starting position (150) through a transition region (142) into a monitoring region (144) in which the predefined position of the body lies or in which the presence of a body should be monitored, and in that the control device (50) limits the torque of the checking element (52) in such a manner that the maximum possible torque in the monitoring region (144) is reduced relative to that in the transition region (142).

22. (Currently Amended) A monitoring device in accordance with Claim 21, wherein ~~characterised in that~~ the motor (20) is a dc motor and the supply of current to the motor (20) is adapted to be limited by the control device (50).

23. (Currently Amended) A monitoring device in accordance with Claim 1, wherein ~~characterised in that~~ the control device (50) controls the pivotal movement of the checking element (52) via combined position, speed and torque controlling.

USSN 09/758 514

24. (Currently Amended) A monitoring device in accordance with Claim 21, wherein ~~characterised in that~~ the speed of the checking element ~~(52)~~ is reducible during its transfer from the transition region ~~(142)~~ into the monitoring region ~~(144)~~.

25. (Currently Amended) A monitoring device in accordance with Claim 24, wherein ~~characterised in that~~ the reduction of ~~the~~ a torque limit is effected after the reduction in the speed of the checking element ~~(52)~~.

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26. (Currently Amended) A monitoring device in accordance with Claim 1, wherein ~~characterised in that~~ an angle transmitter ~~(38)~~ is provided for detecting the position of the checking element ~~(52)~~.

27. (Currently Amended) A monitoring device in accordance with Claim 21, wherein ~~characterised in that~~ the transition region ~~(142)~~ comprises an acceleration region ~~(152)~~ in which the speed of the checking element ~~(52)~~ is increased commencing from the starting position ~~(150)~~.

28. (Currently Amended) A monitoring device in accordance with Claim 21, wherein ~~characterised in that~~ the transition region ~~(142)~~ comprises a braking region ~~(156)~~ in which the speed of the checking element ~~(52)~~ is reduced.

29. (Currently Amended) A monitoring device in accordance with Claim 21, wherein ~~characterised in that~~ the speed of the checking element ~~(52)~~ is maintained substantially constant between an acceleration region ~~(152)~~ and a braking region ~~(156)~~ of the transition region ~~(142)~~.

30. (Currently Amended) A monitoring device in accordance with Claim 21, wherein ~~characterised in that~~ the speed of the checking element ~~(52)~~ is maintained substantially constant in the monitoring region ~~(144)~~.

USSN 09/758 514

31. (Currently Amended) A monitoring device in accordance with Claim 21, wherein ~~characterised in that~~ the control device ~~(50)~~ undergoes a learning cycle for determining the monitoring region ~~(144)~~.

32. (Currently Amended) A monitoring device in accordance with Claim 31, wherein ~~characterised in that~~ a plurality of predefined position-time courses is stored in the control device ~~(50)~~ and a specific position-time course is selected in dependence on a monitoring region as determined in a learning cycle.

33. (Currently Amended) A monitoring device in accordance with Claim 32, wherein ~~characterised in that~~ the monitoring region ~~(144)~~ is set by the control device ~~(50)~~ such that it begins at a certain angular amount prior to a position of the body detected in the learning cycle.

34. (Currently Amended) A monitoring device in accordance with claim 1, wherein ~~characterised in that~~ stop means ~~(28, 34)~~ are provided for limiting the pivotal movement of the checking element ~~(52)~~.

35. (Currently Amended) A monitoring device in accordance with Claim 34, wherein ~~characterised in that~~, for the purposes of setting a reference position ~~(150)~~ of the checking element ~~(52)~~, this is moved at a predefined speed into a stop position in which corresponding stop means ~~(28, 34)~~ touch.

36. (Currently Amended) A monitoring device in accordance with Claim 35, wherein ~~characterised in that~~, for the purposes of defining the reference position ~~(150)~~ of the checking element ~~(52)~~ in the stop position, corresponding stop means ~~(28, 34)~~ are rotated against each other at low torque.

USSN 09/758 514

37. (Currently Amended) A monitoring device in accordance with Claim 1, wherein ~~characterised in that~~ a seal (68) is arranged between the checking element (52) and a housing (12) for accommodating the motor (20) around a shaft (22) by means of which the checking element (52) is driven.

38. (Currently Amended) A monitoring device in accordance with Claim 37, wherein ~~characterised in that~~ the seal (68) abuts on the checking element (52) and abuts on the housing (12).

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39. (Currently Amended) A monitoring device in accordance with Claim 37, wherein ~~characterised in that~~ the seal (68) is formed symmetrically about an axis (24).

40. (Currently Amended) A monitoring device in accordance with Claim 37, wherein ~~characterised in that~~ the seal (68) is seated between the checking element (52) and the housing (12) co-axially relative to the shaft (22).

41. (Currently Amended) A monitoring device in accordance with Claim 37, wherein ~~characterised in that~~ an intermediate space (69) is formed between the shaft (22) and the seal (68).

42. (Currently Amended) A monitoring device in accordance with Claim 37, wherein ~~characterised in that~~ the seal (68) is adapted to be rotationally fixed relative to the checking element (52).

43. (Currently Amended) A monitoring device in accordance with Claim 42, wherein ~~characterised in that~~ the checking element (52) comprises a mounting element (64) for the seal (68) onto which the latter is adapted to be put in order to fix it non-rotationally on the checking element (52).

44. (Currently Amended) A monitoring device in accordance with Claim 43, wherein ~~characterised in that~~ the mounting element (64) is formed by a mounting ring through which the shaft (22) is guided and onto which the seal (68) is adapted to be put.

USSN 09/758 514

45. (Currently Amended) A monitoring device in accordance with Claim 43, wherein ~~characterised in that~~ an annular recess (66) for accommodating the seal (68) is formed between the mounting element (64) and the checking element (52).

46. (Currently Amended) A monitoring device in accordance with Claim 37, wherein ~~characterised in that~~ an outer diameter of the seal (68) substantially corresponds to the diameter of the checking element (52).

47. (Currently Amended) A monitoring device in accordance with Claim 37, wherein ~~characterised in that~~ the seal (68) comprises a packing ring (70) for the purposes of putting it onto the checking element (52).

48. (Currently Amended) A monitoring device in accordance with Claim 37, wherein ~~characterised in that~~ the seal (68) comprises a collar (72) having a V-shaped sealing lip (74) which abuts on the housing (12).

49. (Currently Amended) A monitoring device in accordance with Claim 48, wherein ~~characterised in that~~ the collar (72) is rotatable with the checking element (52) relative to the housing (12).

50. (Currently Amended) A monitoring device in accordance with Claim 48, wherein ~~characterised in that~~ the outer surface (78) of the collar (72) is substantially in the form of a truncated cone at least when force is not being applied thereto in the axial direction.

51. (Currently Amended) A monitoring device in accordance with Claim 50, wherein ~~characterised in that~~ an imaginary cone peak of the collar (72) points towards the checking element (52).

USSN 09/758 514

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52.(Currently Amended) A monitoring device in accordance with Claim 50, wherein ~~characterised in that~~ the inner surface ~~(80)~~ of the collar ~~(72)~~ is substantially in the form of a truncated cone at least when force is not being applied thereto in the axial direction.

53.(Currently Amended) A monitoring device in accordance with Claim 48, wherein ~~characterised in that~~ an axial extent of the seal ~~(68)~~ can be varied via the collar ~~(72)~~.
